



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|---------------------|------------------|
| 10/763,224 | 01/26/2004 | Byoung-Woo Cho | 1781.1001 | 6552 |
| 21171 | 7590 | 10/08/2008 | EXAMINER | |
| STAAS & HALSEY LLP | | | QUINN, RICHAE LEE | |
| SUITE 700 | | | ART UNIT | |
| 1201 NEW YORK AVENUE, N.W. | | | PAPER NUMBER | |
| WASHINGTON, DC 20005 | | | 3765 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 10/08/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,224

Applicant(s)

CHO, BYOUNG-WOO

Examiner

RICHALE L. QUINN

Art Unit

3765

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-11 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-11 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The amendment filed on 12/14/2007 has been fully considered. Claim 1 was amended. Claims 3 and 12 – 14 are cancelled. Claims 1, 2, 4 – 11, and 15 are currently pending.

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Applicants originally filed specification does provide antecedent basis for the limitation requiring the shape tape having a free upper portion not attached to the head receiving portion or the sweat band (claim 1) or the limitations stating the head receiving portion does not comprise the shape tape (claim 15).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant recites "the head receiving portion does not comprise shape tape." Applicant's claim language is unclear as to whether the limitation is intended to recite a separate element or if the applicant is reciting a shape

tape that is not formed with or an integral part of the head receiving portion. Clarification is requested.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4 –9, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgs (US 6,920,644) in view of applicant's specification. The device of Higgs discloses a cap made from woven, first stretchable fabric with twisted yarns and a knit sweatband (12) comprising stretchable, twisted yarns, partially covering the foam core (22) attached to the lower peripheral edge (Figure 4, 4) at the inside of the head receiving portion (Figure 2) wherein the crown (2) is formed from a plurality of stretchable gores (3, 4, 5, 6, 7, 8). It is noted that all natural yarns (i.e. cotton) are inherently spun/twisted and therefore both the weft and warp yarns are formed from high twist yarns. A composite band including a shape tape (21), elastic material (13), foam band core (22) and sweatband (12) is attached to the head-receiving portion along a lower edge of the crown by stitching. The shape tape (21) having a free upper portion not attached to the head receiving portion of the sweat band. It is noted that the lower portion of the shape tape is stitched to the head receiving portion; however, no stitching

is present at the upper portion of the sweatband (12). Therefore, allowing the upper edge of the shape tape (21) to be unattached and free within the sweatband. The composite band and the crown are wholly pressed and stitched together with a stretchable yarn (Column 45 – 56), along a lower edge of the crown (See Figures 2 – 4 and 6, clearly show the thread extending through the crown, the shape tape, and the sweatband). Moreover, according to Steve Warner's text "Fiber Science" Hooke's Law teaches that all materials have the ability to stretch and recover (page 136 –138). Both the sweatband and the crown receive the head of the wearer and are interpreted to be head receiving portions. The shape tape (21) is a separate element and is not comprised of a head receiving portion. The sweatband includes an outer second fabric made from a stretchable cotton terry toweling is covering (12) and a band of elastic material (13) therein. The device of Higgs is lacking a yarn that is twisted more than 800 times per meter. Applicant's specification of 1/26/2004 states in the background of the invention that "high twist yarns that are twisted about 1,000 – 3,000 times are widely used for commercial purposes." Applicant has not provided evidence or disclosure of unexpected results derived from the use of a high twist yarn, twisted over 800 times per meter. The specification teaches that yarn twisted about 1,000 – 3,000 times is widely used and results in stretchable yarn. The general conditions of the claims are disclosed in the admitted prior art. Thus, the 800 value could have been arrived through routine experimentation.

The device of Higgs is silent to the number of times the yarn is twisted, but it would have been obvious to a person having ordinary skill in the art at the time the

invention was made to utilize a yarn twisted more than 800 times per meter in view of applicant's admission of prior art.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higgs as applied to claims 1, 2, 5 –9, and 15 above, and further in view of Nebeker (5,566,395). The modified device of Higgs substantially discloses all of the claimed invention but is lacking the particular type of foam core. Nebeker teaches urethane foam used as the core for a sweatband (Column 1, lines 54- 56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Higgs by using a polyurethane (a type of urethane) foam as taught by Nebeker in order to draw moisture away from the hat (Column 2, lines 23 –24).

Response to Arguments

7. Applicant's arguments filed 12/14/2007 have been fully considered but they are not persuasive.

8. Applicant argues that the shape tape of Higgs is attached to the top and bottom portions of cloth 20. Applicant fails to show or point to the means by which the shape tape is attached. The device of Higgs discloses that the shape tape (21) is formed in a pocket (Figure 6) having the upper end portion free. The device of Higgs discloses that the sweatband is only attached and constrained at the lowermost portion (Column 7, lines 10 - 15). The device of Higgs meets the claimed limitations recited by applicant when interpreted in the broadest reasonable sense.

9. Applicant's arguments see remarks, filed 12/14/2007, with respect to the 112 1st paragraph rejections of claim 15 have been fully considered and are persuasive. The 112 1st paragraph rejection of 8/14/2007 has been withdrawn.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHALE L. QUINN whose telephone number is (571)272-8689. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richale L Quinn
Examiner
Art Unit 3765

/R. L. Q./
Examiner, Art Unit 3765

/Gary L. Welch/
Supervisory Patent Examiner, Art Unit 3765